BY ORDER OF THE COMMANDER
934TH AIRLIFT WING

934TH AIRLIFT WING INSTRUCTION
13-204

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Nuclear, Space, Missile, Command and Control

AIRFIELD OPERATIONS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFI 13-204 Volume 3, *Airfield Operations Procedures and Programs*, Air Force Reserve Command (AFRC) Supplement. It directs procedures to be used for airfield operations activities pertaining to the 934th Airlift Wing (934 AW) and defines requirements and responsibilities of support agencies for services required and provided. This instruction applies to all base and partner units, but is not intended to supplant good judgment in the interest of flight safety. The Airfield Operations Board (AOB) has approved this instruction. This instruction combines various directives, which affects the entire Air Traffic Control (ATC) system at Minneapolis-St Paul International Airport (MSP) ARS (Air Reserve Station), into one document common to all users and service agencies. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication;* route AF Form 847 from the field through the appropriate functional chain of command to (include OPR mailing instructions). Prior to submission, changes must be coordinated by the submitting organization with all affected agencies. The 934 AW Airfield Operations Manager will incorporate all changes. This instruction will be reviewed by the AOB annually. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual 33-363, *Management of Records*, and disposed of in accordance with the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS) located at **https://www.my.af.mil/afrims/afrims/afrims/rims.cfm**. This publication requires the collection and maintenance of information protected by the Privacy Act of 1974.

SUMMARY OF CHANGES

Changes were made to the following areas; airfield facilities, airport lighting systems, intersection departure distances, airport navigational aids and non-standard markings. Removed outdated FAA runway surface condition reading reporting procedures. Updated wing Visual Flight Rule (VFR) training areas. Updated reference tables and attachments.

1. General.

1.1. Scope: This instruction prescribes ATC and Airfield Management (AM) procedures for the 934 AW. AFI 13-204 Volume 3, *Airfield Operations Procedures and Programs, Attachment 2* specifies applicable items that must be addressed herein. Command and wing directives will be consulted in order to determine how to perform specific operations. The

procedures described here are directive in nature and apply to personnel and aircraft assigned to the 934 AW. Deviations from procedures outlined herein are authorized when flying safety dictates, or when directed by ATC or AM.

1.2. Policy. Each unit or assigned organization is responsible for ensuring their personnel are familiar with this instruction.

1.2.1. Word Meanings. The following definitions apply within this instruction.

1.2.1.1. Shall, will, or must – indicate a mandatory procedure.

1.2.1.2. Should – indicates a recommended procedure.

1.2.1.3. May or Need Not – indicates an optional procedure.

1.3. Quiet Hours for Special Events on and around the Airfield (934 AW Apron).

1.3.1. Coordination for "Quiet Hours" requests shall begin with AM (934 OSS/OSA). AM will coordinate with 934 AW/133 AW Command Post (NORTHSTAR), Maintenance Operation Center (MOC), 96 AS, 133 AW, and MSP Air Traffic Control Tower (ATCT). The 934 OG/CC is the approving authority.

1.3.2. AM will send applicable Quiet Hour Notice to (NOTAM) for 934 AW Apron.

1.4. Airfield Coordination Requirements: Airfield activities (e.g. exercises, deployments, crane operations, construction projects, et.) must be coordinated through AM in advance to ensure proper notifications and coordination.

1.4.1. Crane operations must be coordinated through 934 MSG/CEC a minimum of 45 days in advance of the requested operation to ensure a Federal Aviation Administration (FAA) Form 7460-1, *Notice of Proposed Construction or Alteration* is filed as required by Federal Aviation Regulation Part 77, *Objects Affecting Navigable Airspace*. AM must be notified five days in advance of any crane operation to ensure flying operations are not impacted and appropriate NOTAM is published. AM will coordinate all crane operations with Metropolitan Airports Commission (MAC) Airfield Operations (AO). MSP AO is also referred to as Airside Operations. **NOTE**: When the approved FAA Form 7460-1 is returned to the requester, a copy must be sent to 934 MSG/CEC and AM. Failure to coordinate may result in suspension of operations until approved for flying safety.

1.4.2. Temporary Construction Waivers: All proposed airfield construction must be coordinated 45 days in advance through 934 MSG/CEC for approval of a temporary construction waiver by the 934 AW/CC. See Unified Facilities Criteria 3-260-01, *Airfield and Heliport Planning and Design* for further guidance.

1.4.2.1. Project administrators must submit waivers through 934 MSG/CEC 45 days prior to project start.

1.4.2.2. Waiver requests will detail obstructions requiring a waiver and procedures to mitigate safety hazards during the construction.

1.5. Airfield Construction: The base civil engineer or designated representative shall coordinate the location, dates, and times of construction and any restrictions to aircraft operations with AM.

1.5.1. AM will publish an appropriate NOTAMs for all construction projects affecting the 934 AW Apron.

1.5.2. Temporary Airfield Construction Waivers: Shall be signed and approved by 934 AW/CC prior to airfield construction project starting.

1.5.3. Construction Meetings: AM will be invited to all airfield pre-construction, work in-progress, and project acceptance construction meetings.

1.5.4. Airfield construction within restricted areas requires an escort. AM personnel do not provide escort for airfield construction projects.

1.5.5. AM will ensure all contractors are briefed and trained on safe airfield driving procedures IAW 934 AWI 13-213, *Airfield Driving*.

2. Information Regarding Airfield Facilities.

2.1. Airfield Information.

2.1.1. All runways are concrete (grooved) in good to excellent condition; runway gradient variations are less than 0.3% slope. All runways are 150 feet wide, except for 12R/30L which is 200 feet wide.

2.1.2. See **Attachment 2**, *Airfield Diagram.*

2.1.3. Reference current FLIP and Airfield Suitability and Restrictions Report (ASRR) Giant Report for additional information.

2.2. Runway Selection Procedures.

2.2.1. Runway selection shall be determined in accordance with FAA Order 8400.9, *National Safety and Operational Criteria for Runway Use Programs.*

2.2.1.1. Parallel runway selection shall be based on, but not limited to, wind, weather, and traffic conditions.

2.2.1.2. The Terminal Radar Approach Control (TRACON) Operations Supervisor/Controller in Charge (OS/CIC) shall determine the arrival runway.

2.2.1.3. The ATCT OS/CIC shall determine the departure runway.

2.2.2. The Runway Use System gives ATC guidance on noise-sensitive runway selection.

2.2.2.1. Departures are considered noisier than arrivals and shall be considered first when selecting a runway configuration. Departure runway(s) should be considered in descending preference from the chart below based on wind, weather, and airport demand.

2.2.2.2. Once a departure runway configuration has been selected, a corresponding arrival runway configuration shall be selected in descending preference from **Table 1** based on wind, weather, and airport demand.

Table 1. Minneapolis-St Paul Intl Airport Runway Preferences.

Departure Preference	Arrival Preference
Runways 12L/12R	Runways 30L/30R
Runway 17	Runway 35
Either Runway 22 or 04	Either Runway 22 or 04
Runways 30L/30R	Runways 12L/12R

2.2.3. Runways 12L and 12R are designated as the calm wind and primary instrument runways.

2.2.4. Requests for a specific runway, other than normal landing direction, are authorized with up to a 10-knot tailwind.

2.3. Controlled Movement Area (CMA).

2.3.1. The MSP CMA is controlled by MAC AO. The CMA is identified by Non-Movement Area Boundary markings painted across all pavement areas leading to the CMA.

2.3.2. Vehicle operators required to drive within the CMA must contact MAC AO for approval and escort. Exceptions: AM personnel trained/licensed by MAC to operate on Taxiway Romeo, 934 AMXS trained/licensed by MAC to tow aircraft to/from 133 AW Apron and 934 CE personnel issued Conditional Movement Area Permits by MAC to conduct snow removal operations on Taxiway Romeo.

2.3.3. Vehicle operators required to drive on the runways, overruns, or their associated Safety Areas (500 foot wide area centered on the runway centerline for its entire length plus an additional 1,000 feet at each end) must have direct two-way radio contact with MSP ATCT and receive their approval prior to entering. The Runway Safety Areas includes all grass/infield areas within the above mentioned dimensions.

2.3.4. Vehicle operators required to drive on the Taxiways and their associated Safety Areas (distance varies between 125 – 214 feet centered on Taxiway centerline) must have direct two-way radio contact with MSP ATCT and receive their approval prior to entering. The Taxiway Safety Areas includes all grass/infield areas within the above mentioned dimensions.

2.3.5. In the event of radio failure, vehicle drivers operating on the Runways and Taxiways must exit the CMA by the shortest/safest route possible. Once out of the CMA, immediately pullover to a safe location and contact the MSP ATCT directly via cell phone or through MAC AO.

2.3.6. For more specific information concerning MSP CMA see 934 AWI 13-213, *Airfield Driving*.

2.4. Airport Lighting Systems.

2.4.1. Runways. Consult the latest FLIP Instrument Flight Rule Supplement.

2.4.2. Taxiways.

2.4.2.1. Taxiway Edge Lights.

2.4.2.2. Taxiway Centerline Lights (Lead-offs from RWY 35 on TWY Feeders K6, Y, K8 and K10).

2.4.2.3. Taxiway Centerline Reflectors (Taxiways B and Q).

2.4.2.4. Taxiway Guidance Sign Lighting System.

2.4.2.5. Runway Guard Lights. These elevated, alternating-flashing lights are located on all Taxiways leading to the Runways and are positioned adjacent to the Runway Holding Position signs and markings. Some wider taxiways also have in-pavement runway guard lights.

2.4.3. Runway Status Lights. This is a system of in-pavement runway and taxiway lighting which enhances pilot situational awareness by illuminating runway entrance lights when the runway is unsafe for entry or crossing.

2.4.4. Terminal/Apron Lighting.

2.4.4.1. Security/Ballpark Lighting.

2.4.4.2. Facilities Flood Lighting.

2.4.5. Miscellaneous Airport Lighting.

2.4.5.1. Airport Rotating Beacon.

2.4.5.2. Obstruction Lighting.

2.5. Permanently Closed/Unusable Portions of the Airfield.

2.5.1. The following areas on MSP are permanently closed/unusable to aircraft.

2.5.1.1. Old compass swing pad south of taxiway feeder Romeo 6.

2.5.1.2. The portion of Taxiway Alpha west of TWY Feeder A10 (Old TWY Feeder A11).

2.5.1.3. Minnesota Air National Guard (MNANG) Museum Feeder**. Note:** With MAC approval the MNANG Museum Feeder may be used on a case-by-case basis.

2.6. Aircraft Arresting Systems.

2.6.1. Runway 12R has an Engineered Material Arresting System (EMAS) located in the departure end safety area.

2.6.2. If the situation dictates and time permits, coordinate with MSP ATCT prior to engagement.

2.7. Aircraft Parking Plan/Restrictions.

2.7.1. The 934 AW Apron consists of 10 base aircraft parking spots and one Very Important Person (VIP) parking spot. See **Table 2** for coordinates.

Table 2. 934 Airlift Wing Parking Spots.

Parking Spot	Coordinates
1	N4453.59 W9312.72
2	N4453.62 W9312.71
2A	N4453.65 W9312.72
3	N4453.59 W9312.80
4	N4453.62 W9312.80
5	N4453.59 W9312.86
6	N4453.62 W9312.86
7	N4453.58 W9312.92
8	N4453.58 W9313.00
9	N4453.63 W9313.04
VIP	N4453.61 W9312.92

2.7.2. Due to limited 934 AW Apron size, locally based and transient C-130H aircraft may operate (taxi and towing) with reduced obstruction clearance.

2.7.2.1. Operation between 10 and 25 feet of permanent obstacles must be IAW AFI 11-218.

2.7.2.2. Operation with less than 10 feet of permanent obstacles is authorized under the following:

2.7.2.2.1. Operation must be IAW AFI 11-218.

2.7.2.2.2. Aircraft marshaller is required and wing walkers are highly recommended.

2.7.2.2.3. AFI 11-218 waiver authority has been delegated by AFRC/DO to the 934 AW/CC. This instruction documents this waiver and will remain valid until revoked.

2.7.3. Aircraft engine run spots. See **paragraph 2.13.2**.

2.7.4. Maximum on Ground (MOG). The MOG for the 934 AW Apron is as follows:

2.7.4.1. Working MOG.

2.7.4.1.1. Eight base aircraft.

2.7.4.1.2. Two transient C-130Hs or one C-17 or KC-10.

2.7.4.2. Parking MOG (Wartime Aircraft Activity Report).

2.7.4.2.1. Base aircraft present.

2.7.4.2.1.1. Two C-17s/KC-10 (same aircraft or one each) or five C-130Hs.

2.7.4.2.2. Base aircraft not present.

2.7.4.2.2.1. Three C-5s or four C-17s/KC-10s (same aircraft type or any

combination thereof) or fourteen C-130Hs.

2.7.5. Non-standard apron markings.

2.7.5.1. Circles of Safety. A designated area on the apron around each C-130 aircraft parking spot. These areas are marked with six inch wide green arcs painted on the apron and extend 10 feet beyond the nose, wings, and tail of the aircraft. Only essential vehicles in direct support of the aircraft may enter these areas. Spotters are required.

2.7.5.2. Aerospace Ground Equipment (AGE) Boxes. Designated areas on the apron where AGE can be temporarily stored to support aircraft operations. These areas are marked with six inch wide white rectangular boxes (may be bordered in black). Due to the size of the apron, many of the designated AGE boxes are located within 10 feet of an aircraft wing tip clearance. See **Paragraph 2.7.2** above.

2.7.5.3. Aircraft Stop Blocks. Designated areas on the apron where aircraft are parked. These stop blocks are where the aircraft nose wheel is parked/positioned.

2.8. ATC Facilities. MSP ATC facilities consist of the ATCT and TRACON.

2.8.1. MSP ATCT is responsible for the airspace within a 6NM radius of the ASR-9 antenna, from surface to 3,000 feet MSL. The MSP ATCT facility operates 24/7.

2.8.2. MSP M98 TRACON is responsible for the airspace within a 40 NM radius of the MSP ASR-9 antenna from surface to 17,000 feet MSL. The TRACON facility operates 24/7.

2.9. Local Frequencies/Channelization. See **Table 3**.

Table 3. Local Frequencies.

#	NAME	VHF 1	VHF 2	NAME	UHF 1	UHF 2
1	MSP DEP ATIS	120.8	120.8	NORTHSTAR	252.1	252.1
2	MSP CLNC DEL	133.2	133.2	VIKNG OPS	282.675	282.675
3	MSP METERING	133.575	133.575	PMSV	375.2	375.2
4	MSP GND (N)	121.8	121.8	MSP GND	348.6	348.6
5	MSP GND (S)	121.9	121.9	934 INT PLANE	226.55	226.55
6	MSP GND (W)	127.925	127.925	133 INT PLANE	324.3	324.3
7	MSP TWR (12L/30R)	123.95	123.95	MSP TWR	273.55	273.55
8	MSP TWR (12R/30L & 4/22)	126.7	126.7	MSP DEP	357.4	357.4
9	MSP TWR (17/35)	123.675	123.675	MSP ATIS	272.75	272.75
10	MSP DEP (N OR W)	125.75	125.75	MSP APP	335.5	335.5
11	MSP DEP (S OR E)	124.7	124.7	MSP CENTER	239	239
12	MSP ARR ATIS	135.35	135.35	RST APP	251.125	251.125
13	MSP APP (N OR W)	119.3	119.3	RST TWR	257.8	257.8
14	MSP APP (S OR E)	126.95	126.95	DLH APP	255.9	255.9
15	MSP CENTER	132.35	132.35	DLH TWR	257.8	257.8
16	RST APP	119.8	119.8	DLH ATIS	270.1	270.1
17	RST TWR	118.3	118.3	RYM TWR	241	241
18	DLH APP	125.45	125.45	VOK MOA	346.525	346.525
19	DLH TWR	118.3	118.3	VOK APP	290.8	290.8
20	RYM TWR	126.2	126.2	VOK TWR	239.25	239.25

2.10. Air Traffic Control and Landing Systems (ATCALS). Preventive Maintenance Inspection, and Generator Power.

2.10.1. MSP utilizes civil Navigational Aids (NAVAIDS) versus military ATCALS. The NAVAID components are part of the National Airspace System.

2.10.2. The MSP ATCT and TRACON are the designated NAVAID monitoring facilities. All equipment or monitor malfunctions, including alarms, will be promptly reported to the appropriate maintenance personnel.

2.10.3. MSP FAA Technical Operations department maintains all Airport NAVAIDs. See **Table 4**.

Table 4. Minneapolis-St Paul Intl Airport NAVAIDs.

FACILITY	LOCATION	APP CRS	FREQ	CHAN	IDENT
ILS RWY 30L					
LOC	Apch End RWY 12R	301°	110.30 MHz	40	I-MSP
DME	30L GS				
Glide Slope	S of RWY 30L btn TWYs W3 & W2		335.00 MHz		
ILS RWY 30R					
LOC	Apch End RWY 12L	300°	110.70 MHz	44	I-INN
DME	30R GS				
Glide Slope	N of RWY 30R by Ft Snelling GC		330.20 MHz		
ILS RWY 35					
LOC/DME	Apch End RWY 17	349°	110.95 MHz	46 (Y)	I-BMA
Glide Slope	W of RWY 35 & S of TWY L3		330.65 MHz		
ILS RWY 12L					
LOC	Apch End RWY 30R	120°	110.70 MHz	44	I-PJL
DME	30R GS				
Glide Slope	N of RWY 12L & S of TWY R7		330.20 MHz		
ILS RWY 12R					
LOC	Apch End RWY 30L	120°	110.30 MHz	40	I-HKZ
DME	30L GS				
Glide Slope	S of RWY 12R btn TWYs W8 & W9		335.00 MHz		
ILS RWY 4					
LOC	Apch End RWY 22	044°	109.30 MHz	N/A	I-APL
LOC RWY 17	Apch End RWY 35	169°	110.95 MHz	46 (Y)	I-TJZ
LOC RWY 22	Apch End RWY 04	224°	110.50 MHz	N/A	I-SIJ
VOR/DME	W end of Arpt/N of Mother Lake	142/1.1	115.3	100	MSP

2.10.4. Area Navigation (Global Positioning System) approaches are available for Runways 4, 12L, 12R, 22, 30L, 30R and 35.

2.10.5. Preventive Maintenance Inspection (PMI): FAA Technical Operations will coordinate all PMIs with the MSP ATCT Supervisor before shutting down any NAVAID for scheduled maintenance.

2.10.6. Auxiliary Power. All MSP NAVAIDs are equipped with automated battery backup (four hours). In the event commercial power should fail, transition between commercial power and backup battery power is transparent to on-going flight operations.

2.11. Transient Alert. No transient alert service is available at MSP ARS. 934 MXG will provide limited support for transient aircraft on a case-by-case basis. Transient aircraft are normally restricted to operations Mon-Fri 0700-1545L (excluding holidays) and on UTA weekends unless approved by 934 OG/CC. Transient aircrews must coordinate for a Prior Permission Required (PPR) 48 hours in advance.

2.12. Automatic Terminal Information Service (ATIS) Procedures.

2.12.1. ATIS Frequencies (departure 120.8 and arrival 135.35).

2.12.2. MSP ATCT updates the ATIS at least once an hour with new hourly weather observation.

2.12.3. MSP ATCT may update the ATIS more often due to weather, runway configuration, airport information and advisories.

2.13. Aircraft Special Operations Areas/Ramps: Arm/De-Arm Areas, Engine Run-up Areas, Drag Chute Jettison Areas, Hot Pit Refueling Areas, Unmanned Aircraft Systems (UAS) Designated Start Areas.

2.13.1. Arm/De-Arm Areas. MSP does not have designated arm/de-arm areas. If the requirement should arise, MAC AO will determine on a pre-coordinated, case-by-case basis.

2.13.2. Engine Run-up Areas. The following areas are authorized as engine run areas:

2.13.2.1. 934 AW Apron-Primary: Spot 8 (facing west). Aircraft Spots 5 and 7 must be vacated. Secondary: Spot 1 (facing east). Aircraft parking Spots 3 and 5 must be vacated.

2.13.2.2. All other 934 AW Spots are ground idle only.

2.13.2.3. 133 AW Apron-Spot D9 (133 AW coordination required).

2.13.2.4. MAC Run-up Pad. Prior coordination with MAC AO is required.

2.13.3. Drag Chute Jettison Areas. MSP does not have drag chute jettison areas.

2.13.4. Hot Pit Refueling Areas. MSP does not have hot pit refueling areas.

2.13.5. UAS Designated Start Areas. MSP does not have UAS designated start areas.

2.14. Aircraft Towing Procedures.

2.14.1. Aircraft will be towed by qualified maintenance personnel and IAW Technical Order 1C-130H-2-00GE-00-1.

2.14.2. Maintenance personnel requesting tows shall contact the MOC who will contact the NORTHSTAR prior to commencing tow. NORTHSTAR will notify Security Forces before relaying authorization back to maintenance.

2.14.3. When NORTHSTAR is closed maintenance personnel will contact Security Forces directly.

2.14.4. Any individual observing an aircraft moving and the aircraft's intentions cannot be verified should notify the NORTHSTAR immediately. If necessary, NORTHSTAR will initiate anti-hijack checklist. If NORTHSTAR is closed, notify Security Forces, AM and/or the Operations Supervisor (OpsSup).

2.14.5. Maintenance personnel towing aircraft to/from the 133 AW Apron or within any portion of the MSP CMA must be trained and licensed by MAC AO.

2.15. Aircraft Taxiing Requirements/Routes.

2.15.1. No special aircraft taxiing routes are in place for MSP. Aircrews will follow ATC ground instructions. Follow-me service will be provided for all transient aircraft on the 934 AW Apron only.

2.15.2. KC-135 and other aircraft with similar low hanging engines are restricted from using 934 AW Apron taxiway feeders R3, R4 and R7.

2.16. Airfield Maintenance.

2.16.1. Apron Sweeper Operations. Civil Engineering (CE) will dispatch a sweeper a minimum of one day each week to sweep the entire apron. A sweeper with qualified operator will be available on-call Mon-Fri 0700-1600L. All apron sweeper requests should be coordinated through AM. Sweeper operators must contact AM prior to commencing sweeper operations.

2.16.2. Mowing Operations. The normal mowing season is between April and November. The grass around taxiway feeders R3-R8 and the area east and west of the 934 AW apron is maintained by MAC maintenance personnel. The grass around buildings 820, 821, 822, 823, 830, and 870 are maintained by CE personnel and will be mowed as required.

2.16.3. Apron Lighting Repair Operations. MAC and/or the FAA are responsible for maintaining and repairing airport approach lights, runway lights, taxiway lights, obstruction lights, apron/terminal lights, illuminated signs, etc.

2.16.3.1. The CE electrical shop is responsible for maintaining and repairing the 934 AW Apron (ballpark) lights, obstruction lights on 934 AW facilities, and facility flood lights.

2.16.3.2. Airfield Management will notify CE to repair 934 AW Apron lighting outages.

2.17. Runway Surface Condition (RSC) and/or Runway Condition Readings (RCR) values. MAC AO is responsible for determining the predominant RSC/RCR for all runways, taxiways and aprons (exception 934 AW/133 AW Aprons).

2.17.1. Braking Action Reports. At times braking action reports may be reported by ATC in subjective terms of “Good,” “Good to Medium,” “Medium,” “Medium to Poor,” “Poor” and “nil”.

2.17.2. Due to limited apron space, aircraft parking layout, and required vehicle speeds during braking action checks, RCR checks will not be conducted on the 934 AW Apron IAW AFI 13-204V3, AFRC Sup 1. In lieu of RCR checks, the following safety procedures will be utilized to the maximum extent possible during the snow/ice season (normally Nov-Mar):

2.17.2.1. AM will report/record predominate apron surface conditions (e.g. snow, ice, slush, wet, etc.) and depth. Apron surface conditions will be passed to CE, OpsSup, MOC and NORTHSTAR.

2.17.2.2. Aircraft scheduled to fly the next day will be parked in the hangar, when space is available.

2.17.2.3. Aircrews will use extreme caution when taxiing on pavement surfaces that are other than dry. Use of aircraft marshallers is mandatory. If necessary, use wing walkers to the maximum extent possible.

2.17.2.4. Maintenance personnel towing aircraft on pavement surfaces that are other than dry will use extreme caution and follow towing guidance outlined in applicable technical orders.

2.17.2.5. Aircraft remaining on the apron overnight will be parked on the outside (southern) row (Spots 1, 3, 5, 7, and 8). This will allow CE to get an early start on snow removal operations (normally 0300L).

2.17.2.5.1. CE will plow and broom frozen precipitation on the apron from north to south.

2.17.2.5.2. When required, CE will open lanes through the snow berm to allow maintenance personnel access to tow aircraft from the outside row to the inside (northern) row (Spots 2, 2a, 4, 6 and 9).

2.17.2.6. Local training flights will not normally be scheduled prior to 1100L (Nov-Mar). This will allow CE and warmer temperatures time to remove most frozen precipitation from the apron surface prior to start of daily flight operations.

2.17.2.6.1. If required, CE will plow a taxi lane from the aircraft parking spot out to Taxiway Romeo.

2.17.2.6.2. If the apron surface condition is deemed unsafe to operate on by the Aircraft Commander (AC), CE will plow a tow lane from the aircraft parking spot to Taxiway Romeo.

2.18. Procedures/requirements for conducting runway inspections/checks.

2.18.1. MAC AO is responsible for conducting inspections/checks on all MSP runways.

2.18.2. In the event where 934 AW personnel require access onto the runways (e.g. aircraft emergency, etc.) MAC AO personnel will provide an escort.

2.19. Procedures for Opening and Closing the Runway.

2.19.1. MAC will use the approved MSP surface closure process to determine the need for a surface (runway) closure.

2.19.2. MAC AO will issue and coordinate appropriate NOTAMs.

2.19.3. MAC AO will close the runway using the appropriate ATC Local VHF frequency (123.95, 126.7 or 123.675). AO is responsible for all runway closing and reopening communications with ATC. If the task is delegated to another MAC department, ATC must be notified in advance and provided with the call sign of the designated party.

2.19.4. Supervisors or personnel working on closed runways should verify with their personnel what surfaces are opened and closed and update them as conditions change.

2.19.5. The agency/department the closure was coordinated for must check-in with MAC AO prior to entering the runway surface safety area. The department/agency must identify a POC for the work being done and advise AO of the POC's call sign and how they may be reached (800 MHz radio or cell phone – number to be provided to AO). If 800 MHz is used, AO will determine what talk group the POC will be assigned for the work.

2.19.6. Approved construction safety cones will be placed across the runway holding position markings on the closed runway for any intersecting open runways, prior to conducting maintenance and/or construction on the closed runway.

2.19.7. The department/agency performing the construction/maintenance must delineate the boundaries of their work area using approved construction safety cones prior to beginning work. If needed, MAC AO can provide assistance in identifying the work area boundaries.

2.19.8. Any other agency/department wishing to also utilize the runway closure must check-in with MAC AO prior to entering the runway safety area.

2.19.9. Agencies/individuals must communicate off of the closed runway to MAC AO. Under no circumstances are agencies/individuals to report off of the closed runway to ATC if the surface is closed.

2.19.10. Prior to opening a runway, MAC AO will conduct an inspection to confirm all entities are off of the surface. Warning announcements of the runway opening are broadcast on the Metropolitan Airport Commission Airfield (MACAFALL) talk group.

2.19.11. AO will broadcast the runway surface is open on the appropriate ATC local VHF frequency (123.95, 126.7 or 123.675).

2.20. Procedures for Suspending and Resuming Runway Operations (Open Runway).

2.20.1. General MAC policy is to conduct maintenance operations in excess of five minutes on a closed surface.

2.20.2. Runway suspensions necessitated because of unusual aircraft incidents/operations will be coordinated between MSP ATCT and MAC AO.

2.21. Engine Test/Run-up Procedures.

2.21.1. Engine runs will only be conducted in designated engine run locations (see **paragraph 2.13.2** listed above).

2.21.2. The MOC shall contact the NORTHSTAR with all engine run requests. Minimum information required is as follows:

2.21.2.1. Number of engines running and type of engine run (e.g. idle, full-power, etc.)

2.21.2.2. Fuel on board.

2.21.2.3. Number of personnel on board.

2.21.2.4. Duration.

2.21.3. NORTHSTAR will notify Security Forces. If NORTHSTAR is closed the MOC shall notify Security Forces directly.

2.22. Noise Abatement Procedures.

2.22.1. The guidelines for the issuance of air traffic control instructions relating to noise abatement applies to all turbojet and all other Group IV (C-130) and V aircraft.

2.22.2. Arriving aircraft will be vectored at 4,000 ft MSL or higher until intercepting the glidepath unless a particular situation dictates otherwise.

2.22.3. Whenever the normal pattern is over Highland or the South Minneapolis area, a noise sensitive message shall be added to the ATIS.

2.22.4. Overhead approaches are authorized to runways 4, 30L, and 30R.

2.22.5. Intersection departures-turbojet only. ATC shall ensure the intersection takeoffs, for turbojet aircraft, are not initiated when the departure path is over a noise sensitive area; e.g. departing runways 4, 30L, and 30R.

2.22.6. Noise abatement procedures will be consistent with safe operating practices and will provide minimum noise levels over surrounding residential areas. During operations at airfields other than MSP, comply with established noise abatement procedures for that airfield as contained in DoD Flight Information Publication (FLIP) or as issued by ATC.

2.23. Protecting Precision Approach Critical Areas.

2.23.1. The localizer and glideslope critical areas are protected by ILS Critical Area Holding Position signs and markings; see **Attachment 2**.

2.23.2. ILS Critical Area Holding Markings: Two solid parallel yellow lines with vertical yellow stripes (bordered in black). Critical Area Hold Lines are painted on all pavement areas within the CMA that protect the localizer and glide slope critical areas.

2.23.3. During inclement weather conditions (whenever conditions are less than reported ceiling 800 feet or visibility less than 2 miles), MSP ATCT will protect the ILS Critical Areas with instructions to aircraft and vehicle operators.

2.24. Restricted/Classified Areas on the Airfield.

2.24.1. The 934 AW and 133 AW Aprons are designated as restricted areas. Individuals must have a restricted area badge (AF Form 1199, *Air Force Entry Control Card*) or be escorted by a line badge holder.

2.24.2. Maintenance Group personnel are responsible for surveillance of assets parked on the 934 AW Apron or restricted areas during duty hours. Normally the MOC will inform Security Forces when the flightline has been opened or closed. During non-duty hours, weekends, holidays, or any other occasions when maintenance personnel are not performing duties on the aircraft parking apron, or maintenance facilities that contain aircraft, MOC will telephone Base Defense Operations Center (BDOC) and notify them that the responsibility for security surveillance of the restricted areas has been transferred to Security Forces. The airfield security patrol(s) will assume surveillance responsibilities until the MOC notifies BDOC that they are resuming security responsibilities. During that time, anyone approaching the restricted area will be challenged and identified.

2.24.3. Except for approved flight operations, ground taxi and aircraft towing operations, MSP (exception: 934 AW and 133 AW Aprons) is off limits to all 934 AW personnel unless escorted by MAC personnel.

3. Flying Areas.

3.1. General Description of Local Terrain. MSP is not part of any city but is nestled among several. The airport is surrounded by Minneapolis, St. Paul and the suburban cities of Bloomington, Eagan, Mendota Heights and Richfield. The terrain is generally flat with some rolling hills (1,000 feet to 1,200 feet MSL) primarily south of the airport.

3.1.1. Takeoff Obstacles. Reference FLIP/NOTAMs for current data.

3.2. Local Flying Area. The 934 AW local flying area covers five states (MN, WI, IA, SD, ND).

3.3. Designation of Airspace. MSP is Class B airspace.

3.4. VFR Local Training Areas. Generally, the 934 AW local flying area is the VFR local training area.

3.5. VFR Procedures.

3.5.1. VFR Weather Minimums. Standard. Reference current Air Force policy.

3.5.2. VFR Traffic Patterns. VFR overhead and straight-in recoveries are conducted at MSP. See Letter of Agreement (LOA) between MSP ATCT, MAC, 934 AW and 133 AW. This LOA is on file with 934 LRS/LGRDX.

3.5.3. Special Procedures.

3.5.3.1. Land and Hold Short Operations (LAHSO) are conducted at MSP. 934 AW aircrews may passively participate IAW AFI 11-202V3. The Pilot in Command (PIC) is the final authority.

3.5.3.2. Functional Check Flights (FCF). FCFs will be accomplished in the Siren Air Traffic Control Assigned Airspace (ATCAA). The Siren ATCAA must be pre-coordinated with Minneapolis Center. Coordination requirements and flight procedures are outlined in the FCF Guide book located at the Operations Supervisor desk. See **Attachment 3**.

3.5.4. Reduced Same Runway Separation Procedures. Military aircraft are allowed to land as a flight in formation.

3.5.5. Intersection Departures.

3.5.5.1. See **Attachment 2** for intersection departure/runway available data.

3.5.5.2. When requested, ATC will report the lower 50-foot increment. For example, runway 22 from Taxiway C9: 10,388'will be issued by MSP ATCT as 10,350'.

3.6. IFR Procedures.

3.6.1. All aircraft must have a flight plan on file and receive a clearance from MSP ATC prior to entering Class B airspace.

3.6.2. Radar Traffic Patterns. There are no "traffic patterns" per se at MSP. Aircraft are assigned a runway on initial contact with Minneapolis TRACON as dictated by traffic conditions and runway configuration.

3.6.3. Availability/Restrictions for Airport Surveillance Radar (ASR) Approaches and Precision Approach Radar (PAR) Approaches/Monitoring. ASR/PAR approaches do not exist at MSP.

3.6.4. Local Departure Procedures.

3.6.4.1. **Table 5** lists the Standard Instrument Departures (SIDs) for MSP:

Table 5. Minneapolis-St Paul Intl Airport Standard Instrument Departures.

Standard Instrument Departure	Initial Departure Course
COULT Departure	119
DARWIN Departure	281
HESTIN Departure	170
KBREW Departure	293
LEINY Departure	045
MEADOW LAKE Departure	170
MINNEAPOLIS Departure	ATC Assigned
ORSKY Departure	208
ROCHESTER Departure	147
SCHEP Departure	232
SLAYER Departure	170
SMERF Departure	045
WLSTN Departure	072
ZMBRO Departure	138

3.6.4.2. Aircrews must reference current FLIP for additional information.

3.6.5. Radar Vector to Initial Procedures.

3.6.5.1. Formation Recovery Procedures. See LOA between MSP ATCT, MAC, 934 AW and 133 AW. This LOA is on file with 934 LRS/LGRDX.

3.6.5.2. Non-standard Formation Flights. See LOA between MSP ATCT, MAC, 934 AW and 133 AW. This LOA is on file with 934 LRS/LGRDX.

4. Emergency Procedures.

4.1. General: Specific procedures cannot be prescribed for every situation that might be considered an emergency. As a general rule, an emergency includes any situation, which places an aircraft, people and or property in danger or distress. If it is unclear whether a situation is an emergency, treat it as an emergency.

4.2. Type of Declared Emergencies: When an aircrew declares an emergency it will be classified as one of the following:

4.2.1. In-flight – emergencies that occur while airborne.

4.2.2. Ground – emergencies that occur on the ground.

4.2.3. Medical – emergencies involving the health of a crew member or passenger onboard.

4.3. Operation of Primary Crash Alarm System (PCAS) and Secondary Crash Net (SCN). MSP ARS does not have first responder capability and as such does not own or operate a PCAS or a SCN IAW AFI 13-204V3 AFRC Sup 1. The MAC Aircraft Rescue and Fire Fighting (ARFF) responds to all civilian and military aircraft in-flight and ground emergencies.

4.3.1. Emergency Response Procedures: In-Flight/Ground Emergency Procedures (On/Off Base):

4.3.1.1. Alternate PCAS procedures. In the event of an aircraft in-flight or ground emergency, the aircrew will contact MSP ATCT who in turn notifies the MAC ARFF. The aircrew also notifies the NORTHSTAR who then notifies AM/OpsSup and other base agencies via the AtHoc Network-Centric Emergency Mass Notification System.

4.3.1.2. Alternate SCN procedures. For in-flight and ground emergencies on the runways or taxiways the aircrew will notify ATC, as appropriate, (and NORTHSTAR and/or AM Ops/OpsSup) who will notify MAC ARFF. For ground emergencies on the 934 AW Apron when aircrew are not on board the aircraft, maintenance personnel working on the parking apron will notify MOC. MOC will notify Security Forces (and NORTHSTAR and/or AM Ops/OpsSup) who will notify MAC ARFF. NORTHSTAR will notify base agencies via the AtHoc Network-Centric Emergency Mass Notification System.

4.3.1.3. Off-base mishaps. When a report is received from a credible source (ATC Facility, law enforcement, etc.), NORTHSTAR (primary agency) or AM Ops/Ops Sup (secondary agency) will initiate Quick Reaction Checklist pertaining to *Aircraft Mishap Accident/Incident (On/Off Base).*

4.3.2. Designation of the On-Scene Commander (OSC). The 934th MSG/CC is normally the designated OSC; if otherwise, the OSC will be designated by the installation commander. The OSC shall comply with the minimum guidelines established in MSP ARS Plan 10-2, *Emergency Management*.

4.4. External Stores/Cargo Jettison Procedures. The AC will determine the best course of action in an emergency situation. If time and conditions permit use R4301 or R4305 for emergency external stores/cargo jettison. See **Attachments 4** and **5**.

4.5. Fuel Dumping Procedures. The AC will determine the best course of action in an emergency situation. If time and conditions permit use R4301 or R4305 for emergency fuel dumping. See **Attachments 4** and **5**. **NOTE:** External Stores/Cargo Jettison and Fuel Dumping require NORTHSTAR to be notified prior to the event. If the emergency situation does not allow prior notification, NORTHSTAR must be notified as soon as the situation safely allows.

4.6. Emergency Aircraft Arresting System Procedures. Aircraft emergencies involving degraded stopping ability will utilize Runway 12R to the maximum extent possible; 12R is equipped with an EMAS at the departure end.

4.7. Hot Brake Area and Procedures. Designated hot brake areas are as follows:

Table 6. Minneapolis-St Paul Intl Airport Designated Hot Brake/Hung Ordnance Areas.

RWY 17	N/A
RWY 35	17 DEICING PAD
RWY 04	TWY FEEDER C10
RWY 22	TWY FEEDER C2
RWY 30L	12R DEICING PAD
RWY 12R	30L DEICING PAD
RWY 30R	12L DEICING PAD
RWY 12L	30R DEICING PAD

Note: If the de-icing pads are unavailable, the last feeder taxiway for the landing runway will be used.

4.7.1. The aircrew will notify MSP ATCT if they are declaring a ground emergency or are unable to move the aircraft. The aircrew will also notify NORTHSTAR.

4.7.2. Upon notification from MSP ATCT, MAC AO will initially close the affected location (runway, taxiway, apron, etc.). Once MAC ARFF assesses the situation, MAC AO will determine which surfaces can be reopened.

4.8. Abandonment/Bailout of Aircraft. The AC will determine the best course of action in an emergency situation. If time and conditions permit use R4301 or R4305 for emergency abandonment/bailout of aircraft. See **Attachments 4** and **5**. **NOTE:** If using R4301 for emergency operations the aircrew should contact Miller ATCT (49.2 FM / 126.2 VHF (Primary) / 255.4 UHF), or Miller Ops (49.65 FM / 255.4 UHF). If unable to notify these agencies contact NORTHSTAR or VIKING OPS to notify Camp Ripley Post Security at DSN 871-7375, Commercial (320) 632-7375. Post Security will make emergency notifications as required.

4.9. Personnel/Crash Locator Beacon Signal/Emergency Locator Transmitters (ELT).

4.9.1. In the event MSP ATCT contacts the 934 AW (e.g. NORTHSTAR, AM, Operations Supervisor, etc.) about an ELT signal, the contacted agency shall contact the MOC to assess whether any of the 934 AW aircraft have ELT in operation and no ELT maintenance is being performed.

4.9.2. If applicable, have MOC check transient aircraft on the apron.

4.9.3. Notify MSP ATCT of the results of the ELT search.

4.10. Hung Ordnance Areas and Procedures. Same areas and procedures as for hot brakes. See **paragraph 4.7**.

4.11. Wind Limitations on Control Tower. The MSP ATCT will be evacuated IAW internal policy.

4.12. Evacuation of Airfield Management Operation Facilities. When AM Operations (Bldg 821) personnel must be evacuated due to fire, bomb threat, or other unsafe conditions, AM

Operations will relocate to their alternate AM facility in Bldg 641, 133 AW Operations Facility.

4.13. Alternate AM Facility Procedures. See QRC 11, *Airfield Management Facility Evacuation* located in the AM Operations section.

4.14. Open, Closing and Providing Airfield Operation (AO) Services for less than 24-hour Facilities.

4.14.1. MSP ARS normally operates Mon-Thurs 0700-2200L, Fri 0700-1630L Fri, closed weekends and holidays. UTA weekend hours require pre-approval by 934 OG/CC.

4.14.2. Transient aircraft must operate Mon-Fri 0700-1545L, excluding holidays, unless directly supporting 934 AW or other special circumstances. The decision to approve operations outside these times will be determined by mission priority and support availability (limited).

4.14.3. A minimum of one qualified AM specialist (standby when not physically present) and/or Operations Supervisor must be on duty at all times when there is on-going base or transient flight operations.

4.14.4. AM and Operations Supervisor personnel will utilize QRC 20, *Opening and Closing Airfield Operations Facilities* whenever the airfield (934 AW Apron) is opened or closed.

5. Flight Planning Procedures.

5.1. Flight Plans: Aircraft departing MSP ARS must have a flight plan on file with AM Operations prior to flight IAW FLIP.

5.2. A DD Form 175, *Military Flight Plan*, or DD Form 1801, *DOD International Flight Plan*, must be filed for each flight.

5.2.1. Locally filed flight plans can be amended by any means provided a flight plan is on file at AM Operations. Additionally, an aircraft commander on a stopover or divert flight plan may re-file or amend the flight plan with AM Operations by any means provided AM Operations can verify the original flight plan.

5.2.2. Flight plans must list the PIC and appropriate signature of approving authority. All other crew members should be listed on the crew orders.

5.3. Transient/stopover/divert flight plans may be re-filed or amended with AM Operations via any means (radio, telephone, fax, etc.) provided AM Operations personnel can verify an original flight was filed. AM Operations may verify flight plans by contacting the original departure location via telephone or Aeronautical Information System Replacement (AIS-R) flight plan processing computer.

5.4. Processing Flight Plans. AM Operations personnel will file flight plans via the AIS-R computer system. When the primary and alternate AIS-R systems are down, flight plans may be called in to Lockheed Martin Flight Services at (800) 992-7433. When changes to flight plans are necessary, a full route clearance read-back will be entered as the first item in remarks.

6. Miscellaneous Procedures.

6.1. Airfield Operations Board (AOB). The AOB is established IAW AFI 13-204V3 as a forum for discussing, updating, and tracking various activities in support of the 934 AW and 133 AW missions. The AOB meets quarterly or as directed by the respective Operations Group Commanders. The 934th and 133rd Airfield Managers normally conduct the AOB.

6.1.1. AOB members include, but are not limited to representatives from the following units/agencies:

Table 7. AOB Members.

934 AW/CV	934 OSS/OSA	133 OG/OGV	133 CES/CC
934 OG/CC	934 CE/CE	133 OSS/CC	MSP ATCT
934 MSG/CC	934 MXG/CC	133 OSS/OSK	MSP TRACON
934 OG/OGV	934 AW/SE	133 OSS/OSA	MSP CENTER
96 AS/CC	934 CS/CC	133 AW/SE	MSP ARS/CP
96 AS/DO	133 AW/CV	133 AW/SE	MAC AIRSIDE OPS
934 OSS/CC	133 MSG/CC	109 AS/CC	
934 OSS/OSK	133 OG/CC	109 AS/DO	

6.1.2. Mandatory AOB agenda items are outlined in AFI 13-204 Volume 3, *Airfield Operations Procedures and Programs.*

6.1.3. Annual AOB agenda items and when they are to be briefed are as follows:

Table 8. Annual AOB Agenda Items.

Self Inspection	April AOB
Special Interest Items	April AOB
Airfield Certification/Safety Inspection	April AOB
Terminal Procedures	July AOB
LOP Review	July AOB
Aircraft Parking Plan	July AOB
Airfield Waivers	July AOB

6.2. NOTAM Procedures. AM Operations will transmit all required NOTAMs for the 934 AW Apron as necessitated by current restrictions. NOTAMs will be processed IAW AFI 11-208, *Department of Defense Notice to Airmen (NOTAM) System.* In the event the base LAN/server is not working NOTAMs will be processed by 133 AW AM Operations.

6.3. Flight Information Publication (FLIP) Accounts and Procedures for Requesting Changes. AM Operations manages Department of Defense Activity Address Code JM3806.

6.3.1. AM Operations receives and issues FLIP to the 96 AS.

6.3.2. The 96 AS FLIP Manager is responsible for providing AM with a current list of FLIP products.

6.3.3. Non-procedural FLIP revision requests will be submitted via the National Flight Data Center website.

6.4. Prior Permission Requested (PPR) Procedures. MSP ARS requires a PPR for all transient aircraft except those exempted by AFI 13-204V3, *Airfield Operations Procedures and Programs*.

6.4.1. Transient aircraft requesting to park on the 934 AW Apron must obtain a PPR a minimum of 48 hour prior notice.

6.4.2. PPRs are normally only approved Mon – Fri and UTA weekends 0700L – 1545L. The 934 OG/CC is the approving authority for PPRs outside these days/times.

6.4.3. AM Operations will complete a PPR worksheet on each transient aircraft and notify appropriate support agencies.

6.5. Aeromedical Evacuation (AIREVAC) Notification and Response Procedures.

6.5.1. AM Operations will complete a PPR worksheet on each AIREVAC aircraft and notify appropriate support agencies.

6.5.2. AM Operations will notify the Veteran's Administration and/or local point of contact (provided by coordinating aircrew or mission planner) for all AIREVAC aircraft.

6.6. Unscheduled/Unauthorized Aircraft Arrivals.

6.6.1. Unscheduled aircraft entering the 934 AW Apron may be subject to STOP Alert actions by Security Forces. **NOTE:** Every effort will be made to re-direct the aircraft off of the 934 AW Apron by relaying message to the pilot through MSP ATCT.

6.6.2. AM Operations personnel/Operations Supervisor will notify Security Forces, NORTHSTAR, 934 OG/CC, and MOC.

6.6.3. If the aircraft cannot be stopped from shutting down, the pilot will be escorted by Security Forces into Airfield Management once it is safe to do so. AM Operations personnel/Operations Supervisor will obtain pilots name, aircraft registration, unit/company affiliation and point of contact.

6.6.4. From this point, senior leadership will determine appropriate actions.

6.7. Distinguished Visitor (DV) Notification Procedures.

6.7.1. When a DV is inbound to MSP ARS, AM Operations will complete 934 OSA Form 0-2, *Prior Permission Required* form, to include all known DV information.

6.7.2. At a minimum the 934 WG/CC, NORTHSTAR, Protocol, and Operations Group Commander will be notified of all inbound DVs.

6.8. Dangerous/Hazardous Cargo.

6.8.1. The 934 AW Apron Spots 1, 2a, and 3-9 are limited to standard aircraft load defensive Flares and Chaff only.

6.8.2. The 934 AW Apron Spot 2 is the designated Hot Cargo spot. This spot can accommodate class 1.3. up to 3,000 lbs Net Explosive Weight (NEW) and class 1.4. Mission Essential Quantity NEW. Inhabited building distance is 101 feet. Aircraft parking Spots 1 and 2a must be vacated prior to the Hot Cargo spot being utilized.

6.8.3. No hazard class/division 1.1 explosives are allowed on the airfield.

6.8.4. Loading and unloading of hazard class/division 1.2, 1.3, 1.4, 1.5, and 1.6 explosive cargo on the MAC controlled portion of the airfield must be approved by MAC AO. MAC AO will determine the aircraft parking location and coordinate with MAC ARFF as required.

6.8.5. Airfield Management will notify appropriate agencies.

6.9. Night Vision Device (NVD) Operations. NVD aircraft operations are authorized on taxiway Romeo with MAC AO coordination and approval. Prior coordination with Airfield Management, MOC, NORTHSTAR, and Security Forces is also required.

6.10. Local Aircraft Priorities. There are no local aircraft priorities at MSP. Special requests will be handled on a case-by-case basis.

6.11. Lost Communications Instructions. MSP employs the standard lost communication procedures outlined in the Aeronautical Information Manual.

6.12. Standard Climb Out Instructions. Aircrews will comply with MSP ATCT instructions.

6.13. Opposite Direction Take-Offs and Landings. Opposite direction take-offs and landing are authorized (traffic permitting) and are occasionally conducted between 2300L and 0530L IAW local noise abatement procedures. Runway assignment will be based on current traffic conditions.

6.14. Breakout/Go around/Missed Approach Procedures. None specified. Expect ATC to issue instructions, otherwise fly published FLIP procedures.

6.15. Civilian Aircraft Operations. IAW AFI 10-1001, *Civil Aircraft Landing Permits*, civil aircraft are not authorized to use Air Force aprons located on civil airfields, except for civil aircraft chartered by US military departments and authorized use of terminal facilities or ground handling services on the Air Force apron. US military chartered aircraft requesting to use the 934 AW Apron must comply with AFI 10-1001.

6.16. Civil Use of Military NAVAIDs. Military NAVAIDs, or ATCALS, are not located at MSP.

6.17. Aero Club Operations. MSP and MSP ARS do not have Aero Clubs.

6.18. Weather Dissemination and Coordination Procedures – Hazardous/Severe Weather Notification Procedures; Lightning Response.

6.18.1. NORTHSTAR will disseminate/coordinate hazardous/severe weather using the AtHoc Network-Centric Emergency Mass Notification System. If the NORTHSTAR is closed, AM Operations personnel/Operations Supervisor will make notifications.

6.18.2. Whenever there is lightning within 5 NM of MSP the 934 AW Apron will be cleared. The MOC is responsible for monitoring and coordinating lightning within 5 NM procedures.

6.19. Airfield Snow Removal Procedures: The 934 MSG/CE is the OPR for snow removal operations. Airfield snow removal will be conducted IAW 934 OPLAN 32-1002, *Snow and Ice Control.*

6.20. Bird/Wildlife Control. MAC AO shall mitigate bird/wildlife hazards as outlined in Airport Certification Manual, Section 25 (Part 139.337), *Wildlife Hazard Management* and Exhibit 14, *Wildlife Management Plan*. Mitigation may include any or all of the following:

6.20.1. Habitat Modification: Maintain grass between 7 – 14 inches.

6.20.2. Hazing: Types of hazing include propane cannons/electronic distress cry generators, pyrotechnics, paintball guns, and effigy.

6.20.3. Population Management: Includes capture/relocate, capture/euthanize, egg/nest destruction, and depredation.

6.21. Bird Watch Conditions (BWC). IAW 934th/133rd Plan 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH)* the following standard AF terminology will be used for rapid communications to disseminate bird activity and implement operational procedures:

6.21.1. BWC SEVERE. Heavy concentrations of birds above and in the immediate vicinity of the runway or specific locations on a low level route that pose an immediate hazard to safe flying operations.

6.21.2. BWC MODERATE. Concentrations of birds observed or in predictable locations that represent a possible hazard to safe flying operations. Declaration of condition moderate requires increased vigilance by all agencies and aircrews.

6.21.3. BWC LOW. Little or no bird activity in the vicinity of the runway. Very low probability of hazard to safe flying operations.

6.21.4. Authority. The primary agency to declare BWC moderate or severe is the OpsSup. When the OpsSup is not on duty it is AM Operations responsibility. Any declared BWC condition is for 934 AW aircraft only and has no effect on other aircraft operating at MSP. ***NOTE:*** The OpsSup and AM Operations personnel are restricted to declaring the BWC for the 934 AW Apron. Due to this potentially serious limitation, aircrews must contact MSP ATCT for a more accurate assessment of the actual birds in the vicinity of MSP.

6.21.5. Communications. During normal flight operations, the reported BWC will be passed by the OpsSup to the NORTHSTAR. NORTHSTAR will notify Flight Safety and the 96 AS. The BWC will be posted on the airfield status board located in the AM Operations section. When the BWC is moderate or severe the NORTHSTAR will broadcast to airborne aircraft.

6.21.6. Downgrading. Once a BWC has been declared, it is the declaring authority's sole responsibility to either cancel or downgrade the condition commensurate with updated information. Flight Safety will follow-up on all increased BWCs.

6.21.7. BWC Restrictions.

6.21.7.1. Condition Severe. All takeoff and landings prohibited. Waiver authority is OG/CC.

6.21.7.2. Condition Moderate. Initial takeoffs and final landings allowed only when departure and arrival routes will avoid bird activity. Local IFR/VFR traffic pattern activity is prohibited.

6.21.7.3. Condition Low. No restrictions.

6.22. Supervisor of Flying (SOF) Operating in the Tower. IAW AFI 11-418 *Operations Supervision* and local directives, a SOF on duty is not required at the 934 AW; however, an Operations Supervisor (OpsSup) performs required duty at AM Operations, not the MSP ATCT.

6.23. Airfield (934 AW Apron) Photography. 934 AW personnel may take photographs on the 934 AW Apron (Restricted Area) for official business after coordination with MOC and the Base Defense Operations Center (BDOC). Non-wing personnel or wing personnel wishing to take personal photographs must coordinate with Public Affairs (PA) for approval. PA coordinates with the area owner and pre-notifies MOC and BDOC. **NOTE:** US Secret Service must give approval to take photos of Air Force One and Two and Marine Corps security personnel must give approval to take pictures of Marine One.

6.24. Tactical Arrival/Departure Procedures.

6.24.1. Formation and single-ship VFR overhead and straight-in recoveries are conducted at MSP. See Letter of Agreement (LOA) between MSP ATCT, MAC, 934 AW and 133 AW. This LOA is on file with 934 LRS/LGRDX.

6.24.2. Traffic permitting, these procedures are approved by MSP ATCT.

6.25. UAS Operations Procedures. MSP does not support UAS operations.

ANTHONY G. POLASHEK, Colonel, USAF
Commander, 934th Airlift Wing

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 13-204 Volume 3, *Airfield Operations Procedures and Programs*

Federal Aviation Regulation Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*

Unified Facilities Criteria 3-260-01, *Airfield and Heliport Planning and Design*

934 AWI 13-213, *Airfield Driving*

FAA Order 8400.9, *National Safety and Operational Criteria for Runway Use Programs*

MSP ARS Plan 10-2, *Comprehensive Emergency Management Plan*

AFI 11-208, *Department of Defense Notice to Airmen (NOTAM) System*

AFI 13-213, *Airfield Driving*

AFOSH Standard 91- 100, *Aircraft Flight Line Ground Operations and Activities*

AFI 10-1001, *Civil Aircraft Landing Permits*

934 OPLAN 32-1002, *Snow and Ice Control*

Airport Certification Manual, *Section 25 (Part 139.337), Wildlife Hazard Management and Exhibit 15, Wildlife Management Plan*

934th /133rd Plan 91-212, *Bird/Wildlife Aircraft Strike Hazard (BASH)*

AFI 11-418, *Operations Supervision*

Adopted Forms

FAA Form 7460-1, *Notice of Proposed Construction or Alteration.*

DD Form 175, *Military Flight Plan.*

DD Form 1801, *DOD International Flight Plan.*

AF Form 1199, *Air Force Entry Control Card.*

AF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AF—Air Force

AFI—Air Force Instruction

AFMAN—Air Force Manual

AFOSH—Air Force Occupational Safety and Health Standard

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AGL—Above Ground Level

AIREVAC—Air Evacuation

AISR—Aeronautical Information System Replacement

ALSF—2 – High Intensity Approach Lighting System Category II with Sequence Flashing Lights

AM—Airfield Management

AO—Airfield Operations

AOB—Airfield Operations Board

APP—Approach

ARFF—Aircraft Rescue and Fire Fighting

ARPT—Airport

ARR—Arrival

ARS—Air Reserve Station

ASR—Airport Surveillance Radar

ATC—Air Traffic Control

ATCT—Air Traffic Control Tower

ATIS—Automatic Terminal Information Service

AW—Airlift Wing

AWI—Air Wing Instruction

BDOC—Base Defense Operations Center

BLDG— Building

BTN— Between

BWC—Bird Watch Condition

CC—Commander

CE—Civil Engineering

CHAN—Channel

CIC – Controller-in—Charge

CL—Centerline or Centerline Lighting (whichever applicable)

CLNC—Clearance

CMA—Controlled Movement Area

CON—Control

CP—Command Post

CRS—Course

DEP—Departure

DER—Departure End Runway

DLVY—Delivery

DME—Distance Measuring Equipment

DO—Director of Operations

DOD—Department of Defense

DV—Distinguished Visitor

E—East

ELT—Emergency Locator Transmitter

EMAS—Engineered Material Arresting System

FAA—Federal Aviation Administration

FLIP—Flight Information Publication

FOD—Foreign Object Debris/Damage

FREQ— Frequency

GND—Ground

HIRL—High Intensity Runway Lights

HQ—Headquarters

IAW—In Accordance With

ICAO—International Civil Aviation Organization

IDENT— Identifier

IFR—Instrument Flight Rules

ILS—Instrument Landing System

IMT—Information Management Tool

INT—Interplane

INTL—International

LAHSO—Land and Hold Short Operations

LDA—Landing Distance Available

LOA—Letter of Agreement

LOC—Localizer

M—F – Monday through Friday

MAC—Metropolitan Airports Commission

MACAF—Metropolitan Airports Commission Airfield

MAJCOM—Major Command

MALSF—Medium Intensity Approach Lighting System with Sequence Flashing Lights

MALSR—Medium Intensity Approach Lighting System with Alignment Indicator Lights

MHz—Megahertz

MNANG—Minnesota Air National Guard

MOC—Maintenance Operations Center

MOG—Maximum on Ground

MOU—Memorandum of Understanding

MSG—Mission Support Group

MSL—Mean Sea Level

MSP – Minneapolis—St Paul International Airport

MXG—Maintenance Group

N—North

N/A—Not Applicable

NAVAIDs—Navigational Aids

NEW—Net Explosive Weight

NM—Nautical Mile

NOTAM – Notice-to—Airmen

NVD—Night Vision Devices

OG—Operations Group

OGV—Standard Evaluation

OI—Operating Instruction

OPR—Office of Primary Responsibility

OPS—Operations

OS—Operations Supervisor

OSA—Airfield Operations

OSC – On—Scene Commander

OSK—Tactics

OSS—Operations Support Squadron

PA—Public Affairs

PAPI—Precision Path Indicator Lights

PAR—Precision Approach Radar

PMSV – Pilot-to—Metro Service

POC—Point of Contact

POV—Privately Owned Vehicle

PPR—Prior Permission Required

QRC—Quick Reaction Checklist

RAIL—Runway Alignment Lights

RCR—Runway Condition Reading

RDS—Records Disposition Schedule

REIL—Runway End Identifier Lights

RSC—Runway Surface Condition

RWY—Runway

S—South

SE—Safety

SF—Sequence Flashing Lights

SR—Slow Speed Low Altitude Training Route

TDZL—Touchdown Lighting

TRACON—Terminal Radar Approach Control

TWR—Tower

TWY—Taxiway

UAS—Unmanned Aircraft System

UHF—Ultra High Frequency (300-3000 MHz)

USAF—United States Air Force

UTA—Unit Training Assembly

VA—Veterans Administration

VFR—Visual Flight Rules

VHF—Very High Frequency (30-300 MHz)

VIP—Very Important Person

VMC—Visual Meteorological Conditions

VOL—Volume

VOR—VHF Omni-range

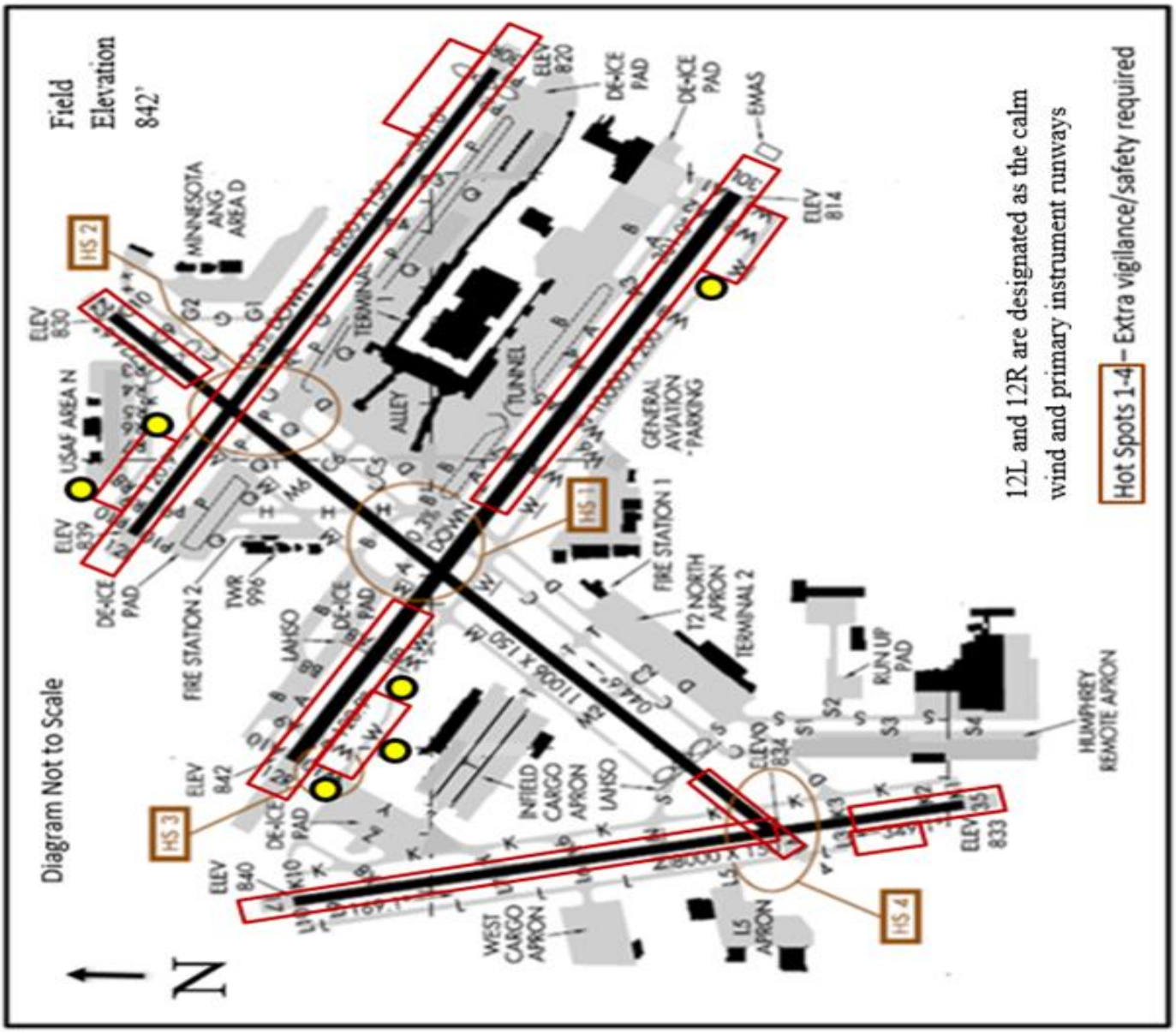
VR—VFR Military Training Route

W—West

Attachment 2

AIRFIELD DIAGRAM

Figure A2.1. AIRFIELD DIAGRAM.



Airfield Diagram – Additional Information

- **Runways:** Concrete (grooved). Gradient variations do not exceed 0.03% slope.
- **Taxiways:** All primary taxiways are a minimum of 75 feet wide and concrete.
- **Controlled Movement Areas:** Runways and Taxiways and their respective safety areas.
  - Runways – Two-way radio contact and prior approval from MSP ATCT required.
  - Taxiways – Prior coordination and escort from MAC AO required.
  - Runway Safety Areas:
    - Length: Entire length of runway plus 1,000 feet at each end.
    - Width: 500 feet (250 feet each side of centerline).
    - Includes all grass/infield areas within these dimensions.
  - Taxiway Safety Areas:
    - Vary from 125 – 214 feet (centered on the Taxiway centerline). The width is based on the largest aircraft that is authorized to use the taxiway.
    - Includes all grass/infield areas within these dimensions.

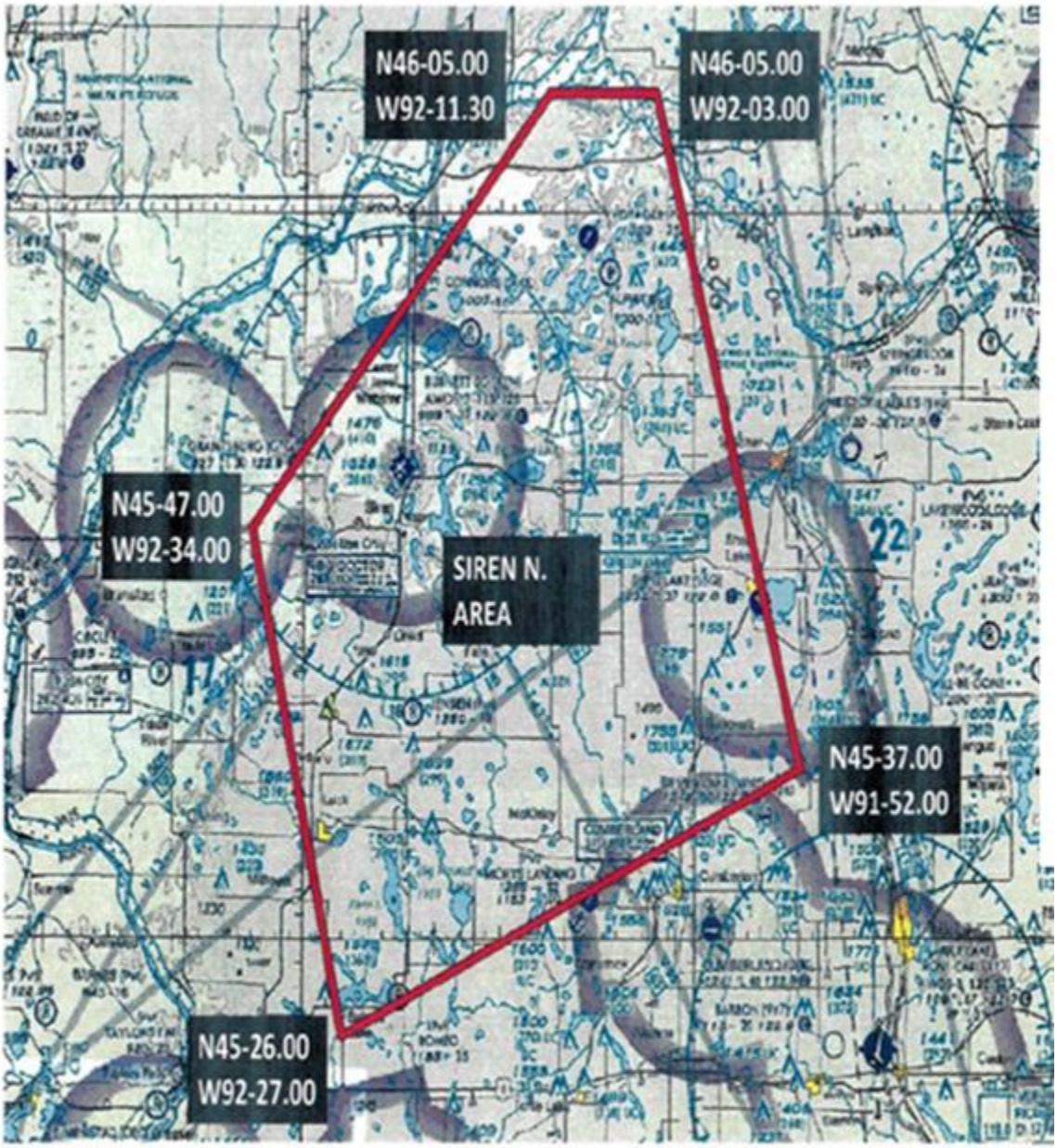
- **Glide Slope / Localizer Critical Areas:** 
- **Instrument Hold Line Locations:**  =
  - Taxiway R8
  - Taxiway R (west of TWY R7)
  - Taxiway W (east of TWY W9)
  - Taxiway W (west of TWY 10)
  - Taxiway W (west of TWY W2)
  - Taxiway Y (south of TWY W10)
- **Intersection Departure Distances:**

RWY 04		RWY 22		RWY 17		RWY 35	
TWY K	10492'	TWY C9	10388'	TWY L9	7550'	TWY K2	7550'
TWY S	9420'	12L/30R	9034'	TWY K8	6850'	TWY K3/L3	6500'
TWY C2	8206'	TWY P	8623'	TWY L7	5550'	04/22	5722'
TWY T	7347'	TWY Q	8211'	TWY L6	4600'	TWY N	4350'
TWY W	5862'	TWY C6	7603'	TWY N	3650'	TWY K6	3525'
12R/30L	5450'	TWY H	6843'	04/22	2278'	TWY L6	3400'
TWY A	5038'	TWY B	6509'	TWY L3	1500'	TWY Y	2565'
TWY B	4497'	TWY A	5968'	TWY K2	450'	TWY L7	2450'
TWY H	4163'	12R/30L	5556'			TWY K8	1150'
TWY C6	3403'	TWY W	5144'			TWY L9	450'
TWY Q	2795'	TWY T	3659'				
TWY P	2383'	TWY C2	2800'				
12L/30R	1972'	TWY S	1586'				
TWY C9	618'	TWY K	514'				
**RWY 12L		RWY 12R		RWY 30R		RWY 30L	
TWY P9/R9	7200'	TWY A9/W9	9550'	TWY P2	7720'	TWY A2	9550'
TWY M	5965'	TWY A8/W8	8100'	TWY P3	6210'	TWY W3	8050'
04/22	5399'	TWY M	7140'	TWY P4	5420'	TWY A3	7880'
TWY C	4987'	04/22	6671'	TWY G (s)	3895'	TWY A4	6605'
TWY P8	4410'	TWY C (s)	6186'	TWY G (n)	3801'	TWY A5/W5	6150'
TWY G (n)	3819'	TWY C (n)	6150'	TWY P8	3210'	TWY A7/W7	5250'
TWY G (s)	3725'	TWY D	5850'	TWY C	2832'	TWY D	4150'
TWY P4	2150'	TWY A7/W7	4750'	04/22	2221'	TWY C (n)	3850'
TWY P3	1456'	TWY A5/W5	3850'	TWY M	1655'	TWY C (s)	3814'
TWY P2	0'	TWY A4	3395'	TWY P9/R9	420'	04/22	3329'
		TWY A3	2120'			TWY M	2860'
		TWY W3	1950'			TWY A8/W8	1900'
		TWY A2/W2	450'			TWY A9/W9	450'
**Distance to go for RWY 12L is based on Declared Distance Length of 7,620							

Attachment 3

SIREN NORTH ATCAADESIGNATED FUNCTIONAL FLIGHT CHECK AREA

Figure A3.1. Siren North Atcaadesignated Functional Flight Check Area.



NOTE: Pre-coordination with MSP ARTCC is required.

Attachment 4

AIRCRAFT EMERGENCY LOCATION

Figure A4.1. Aircraft Emergency Location.

(External Stores/Cargo Jettison, Fuel Dumping and Abandonment/Bailout)

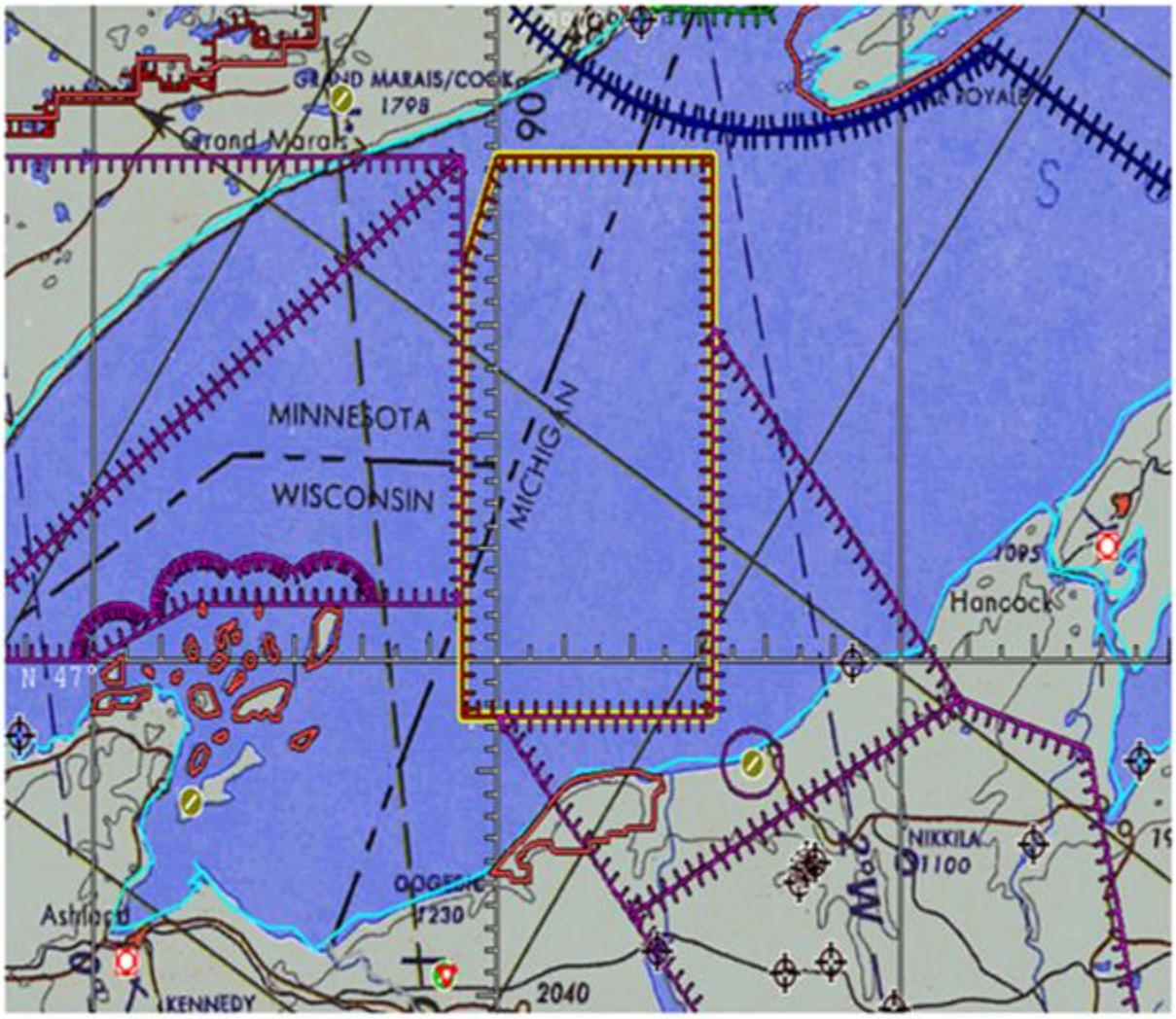
R4301, Camp Ripley, MN, Restricted, SURFACE – FL270
Minneapolis Center 118.05 Mhz/239.0 Mhz
Controlling Authority: FAA Minneapolis ARTCC, KZMP

Attachment 5

AIRCRAFT EMERGENCY LOCATION

FIGURE a5.1. Aircraft Emergency Location.

(External Stores/Cargo Jettison, Fuel Dumping and Abandonment/Bailout)



R4305, Lake Superior, MN, Restricted, SURFACE – FL450
Minneapolis Center 133.55 Mhz/127.2 Mhz
Controlling Authority: FAA Minneapolis ARTCC, KZMP